

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method for the detection of an base sequence of interest in a sample ~~DNA or RNA~~ polynucleotide comprising consisting essentially of the steps of:

(1) contacting a ~~the sample DNA or RNA~~ polynucleotide with to at least one kind of probe ~~DNAs or RNAs~~ polynucleotides in an aqueous solution to form a hybridization complex;

(2) isolating the hybridization complex;

(3) dissociating the hybridization complex to recover the probe ~~DNAs or~~ RNAs polynucleotides; and

(4) identifying the ~~said probe DNA or RNA~~ polynucleotides to detect ~~an~~ the base sequence of interest in the sample ~~DNA or RNA~~ polynucleotide.

2. (currently amended): The method according to claim 1, wherein the hybridization is carried out in such a manner that ~~any none of the sample DNA or RNA~~ polynucleotide and or the probe ~~DNAs or RNAs is not~~ polynucleotides are immobilized.

3. **(currently amended):** The method according to claim 1 or 2, wherein plural kinds of probe ~~DNAs or RNAs~~ polynucleotides are used to detect plural base sequences of interest.

4. **(currently amended):** The method according to ~~any of claims 1 to 3~~ or 2, wherein the probe ~~DNAs or RNAs~~ polynucleotides are labeled with fluorescent substance.

5. **(currently amended):** The method according to ~~any of claims 1 to 4~~ or 2, wherein the probe ~~DNAs or RNAs~~ polynucleotides are identified by means of hybridization with a polynucleotide chain complementary chain DNA thereof ~~thereto~~.

6. **(currently amended):** The method according to claim 5, wherein the polynucleotide chains complementary to the probe polynucleotides ~~chain DNAs or RNAs~~ are immobilized.

7. **(currently amended):** The method according to claim 6, wherein the immobilized polynucleotide chain complementary to the probe polynucleotides ~~chain DNAs or RNA~~ are in a the form of a DNA or RNA chip.

8. **(new):** The method according to claim 1 or 2, wherein plural kinds of probe polynucleotides are used to detect plural, non-contiguous base sequences of interest.